SADDLEBACK COLLEGE
BUSINESS SCIENCE DIVISION
COURSE SYLLABUS
CIMN-210 NETWORKING ESSENTIALS AND TECHNOLOGIES

Instructor: Steve J. Korper `
E-Mail: skorper@saddleback.edu
Office: BGS-221
Cell: (949) 831-7984 7:00AM-11:00PM

01/19/16 through 05/23/16
Semester: Spring 2016
Ticket No: 11785
Room: BGS-234
Time: 6:00PM-9:50PM, T

Office Hours: Jan 19 to Mar 15 2:00PM to 3:00PM then Mar 29 to May 17 5:00PM to 6:00PM BGS-221 and Jan 19 to May 23 Virtual 10:00PM to 11:00PM M, W, Th, and F

COURSE DESCRIPTION:

Presents LAN and WAN technologies. Covers network operations, design, protocols, basic Cisco switch, router programming, and troubleshooting. Students will learn how to set up workstations, design LAN and WAN networks using hubs, switches, and routers (formerly CIM 252).

COURSE OBJECTIVES:

Upon completion of this course, the student will be able to:

1. List and describe the basic elements of computer networking.
2. List and describe common network strategies and topologies.
3. Describe and evaluate implementation of five common network services within various organizational scenarios.
4. Identify and describe common hardware components of a network, as well as cable and wireless transmission media.
5. Evaluate implementation of common cable and wireless transmission media and include their associated cost, ease of installation, capacity, attenuation, and immunity from interference characteristics.
6. Identify and describe common network and internetwork connectivity devices, as well as how network software is used to communicate over a network.
7. Evaluate implementation of common network and internetwork connectivity devices according to a given organizational scenario.
8. Categorize and identify the OSI Reference Model and describe how communication layers interact.
9. Define standards and protocols and how they are used in the computer networking industry.
10. Use conceptual knowledge of five protocol stacks and a variety of miscellaneous protocols to identify the individual protocols that relate to a given organizational scenario.
11. Relate future concepts and possibilities for computer networks based on readings in assigned industry publications.
12. Identify and describe the basic functions of network managements.
13. Complete applications which include hands-on experience with

installation and interconnectivity among different NOS and protocol analyzers.

STUDENT LEARNING OUTCOMES:

1. Students will be able to physically assemble basic network components
2. Students will be able to perform basic IP subnetting
3. Students will be able to configure workstations for network access
4. Students will be able to perform basic router programming

STUDENT RESOURCES:

Text: "Practical Networking Activities", Third Edition; Warren; All American Publishing; ISBN# 0-9726518-3-7

ASSIGNMENTS AND TESTS:

Reading assignments are required each week. There will be a total of Three (3) quizzes, Seventeen (17) lab exercises, and One (1) final exam. All testing will consist of a combination of multiple-choice, fill-in, true/false, performance testing, and short-answer.

POLICIES AND PROCEDURES:

1.) Courteous and proper behavior is expected and required in this class.
2.) Academic Dishonesty: Plagiarism and cheating are serious offenses and may be punished by failure on exam, paper or project; failure in course; and or expulsion from the College. For more information refer to the "Code of Conduct" policy in the Saddleback College Student Handbook (available online at http://www.saddleback.edu/media/pdf/handbook.pdf).
For this class, it is permissible to assist classmates in general discussions. General advice and interaction are encouraged. HOWEVER, each student must develop his or her own solutions to all assigned work. In other words, students may **NOT** "work together or help each other" on any Graded Work.

ASSIGNMENTS AND TESTS:

Reading assignments are required each week. Quizzes are to be completed each according to the class schedule. All testing will consist of a combination of multiple-choice, true/false, and short-answer. LATE work will NOT be accepted. MISSED quizzes CANNOT be made up.

E-Mail:

Every student is assigned a college e-mail account and pin number (password). **Do not** change your e-mail address. If you prefer to receive e-mail at another address, go to http://www.saddleback.edu and then to MySite, select "E-mail" and follow the instructions under "Account Information" to automatically **forward** your messages to the address of your choice.

ACCESS TO BLACKBOARD (SADDLEBACK'S ONLINE PORTAL):
Go online to http://socccd.blackboard.com , click on "Logon." Your user name and password is the same as your e-mail. If you have a problem, a link to the Blackboard Help Desk and a toll free number are listed to the right of the login. If you have additional questions or problems, go to http://www.saddleback.edu/de/help1.html for the Student Technical Support site.

STUDENTS RESPONSIBILITY:
It is the STUDENTS RESPONSIBILTY to officially withdraw (DROP) from the class by the appropriate date.

GRADING:
Final grades will be determined on an exact percentage scale; there will be no deviation from this scale.

90-100%	=A	25%-Quizzes
80-89%	=B	25%-Lab Book Exercises
70-79%	=C	50%-Final Exam
60-69%	=D	
Below 60%	=F	

Final grade percentage is determined through a weighted average of the exams and discussion board. Students having the course PASS/NO PASS must receive 70% or above for a passing grade.

STUDENTS WITH DISABILITIES:
If you need course adaptations or accommodations because of a disability or if you need special arrangements, please contact me as soon as possible. Contact Disabled Student Services to register and verify your disability: Telephone 582-4885 (voice) or 582-4833 (TDD).

This course meets the requirements set forth in the accessibility checklist and universal design grid provided by Special Services. The Web pages, video presentations, textbooks and class materials in this course are accessible to students with disabilities.

IMPORTANT DATES:

First Week of Class Begins:	Tuesday, 1/19/2016
First Class Meeting on:	Tuesday, 1/19/2016
Add without Instructor Permission by:	Monday, 1/18/2016
Last Day to Add with APC*:	Sunday, 2/7/2016
Drop with Refund by:	Sunday, 1/31/2016
Elect Pass/No Pass by:	Wednesday, 2/24/2016
Drop without 'W' Grade by:	Sunday, 2/7/2016
Drop with 'W' Grade by:	Tuesday, 4/12/2016

THIS COURSE SCHEDULE IS SUBJECT TO CHANGE AND MAY BE MODIFIED.

COURSE SCHEDULE

Week	Date	Activity
1	Jan 19	**Lab Assignment-**Computer log-in, class software, and lab manual orientation.
		Class Lecture-Course Introduction.
2	Jan 26	**Lab Assignment-** Lab Exercise #01 and #02 from the lab book.
		Class Lecture-IP Subnetting and VLSM.
3	Feb 02	**Lab Assignment-** Lab Exercise #03 from the lab book.
		Class Lecture-Cover T-568A and T568B wiring standards and construct a cross-over cable.
4	Feb 09	**Lab Assignment-**Lab Exercise #04 from the lab book.
		Class Lecture-Construct a functional peer-to-peer network.
5	Feb 16	**Lab Assignment-**Lab Exercise #05 from the lab book.
		Class Lecture-Hardware functionality and selection criteria.
6	Feb 23	**Lab Assignment-**Lab Exercise #06 from the lab book.
		Class Lecture-Hardware etc. (Quiz #1)(Happening Test!)
7	Mar 01	**Lab Assignment-**Lab Exercise #07 from the lab book.
		Class Lecture-Construct a work group using switches and hubs.
8	Mar 08	**Lab Assignment-** Lab Exercise #08 from the lab book.
		Class Lecture-IP Subnetting Quiz (Quiz #2) and FiberOptics demonstration.
9	Mar 15	**Lab Assignment-**Lab Exercise #09 from the lab book.
		Class Lecture-WAN fundamentals and protocols.
10	Mar 22	**NO CLASS! Spring Break!**
11	Mar 29	**Lab Assignment-**Lab Exercise #10 and #11 from the lab book.
		Class Lecture-Introduction to PacketTracer.
12	Apr 05	**Lab Assignment-**Lab Exercise #12 from the lab book.
		Class Lecture-Router IOS.
13	Apr 12	**Lab Assignment-**Lab Exercise #13 from the lab book.
		Class Lecture-Programming routers for WAN connectivity.
14	Apr 19	**Lab Assignment-**Lab Exercise #14 from the lab book.
		Class Lecture-One-on-one practical quiz. (Quiz #3)
15	Apr 26	**Lab Assignment-**Lab Exercise #15 from the lab book.
		Class Lecture-Construct massive WAN/LAN
16	May 03	**Lab Assignment-**Lab Exercise #16 from the lab book.
		Class Lecture-WAN/LAN Design using Packet Tracer.
17	May 10	**Lab Assignment-**Lab Exercise #17 from the lab book.
		Class Lecture-WAN/LAN Design using Packet Tracer. (Expanded)
18	May 17	**FINAL EXAM-**Comprehensive

Note: The above schedule may change, according to the class' dynamics.